

REMARKS

Claims 1-4 are pending in the present application.

I. FORMAL MATTERS

Applicant notes with appreciation that the Office Action acknowledges the claim to priority and indicates that the priority documents have been received.

Applicant notes with appreciation that the Office Action includes a copy of the PTO Form 1449 that was submitted with the Information Disclosure Statement filed on June 10, 2004. Each reference is initialed by the Examiner, thereby indicating that these references were considered and will be listed on the face of any patent that issues from the present invention.

Applicant notes with appreciation that the drawings filed on July 2, 2004 are acceptable.

The Examiner asserts that the title of the invention is not descriptive. Applicants have amended the title as presented above. Applicant submits that this title clearly indicates the invention to which the claims are directed.

II. PRIOR ART REJECTIONS

Claims 2 and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,526,048 (Yamamoto). Claims 1 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamamoto in view of U.S. Patent No. 5,382,978 (Tanaka). These rejections are traversed.

In Yamamoto, the unnecessary charge is transferred from the vertical transfer CCD 54, which is regarded as the claimed shift register to the smear drain 55 (see the upper side of Fig. 4), and the signal charge is transferred from the vertical transfer CCD 54 to the accumulating unit 53 and then the horizontal transfer CCD 56 (the lower side of Fig. 4). In contrast, in the present invention, both the signal charge and unnecessary charge are commonly transferred from the shift register to the output section. Yamamoto and Tanaka do not disclose this feature.

Further, in Yamamoto, the time period for which the unnecessary charge is transferred from the vertical transfer CCD 54 to the smear drain 55 and then discharged externally through the smear drain 55 is common to each CCD 12, 13, 14 (G-, R-, B-component) (Fig. 6 and Col. 5, lines 50 – 56). In the present invention, the time period for which the unnecessary charge is transferred from the shift register to the output section is different for each sensor section.

Therefore, because Yamamoto does not teach or suggest each and every feature

of claims 2 and 4, the rejection of claims 2 and 4 under 35 U.S.C. § 102(b) is overcome. Also, because the combination of Yamamoto and Tanaka does not form the invention recited in claims 1 and 3, the rejection of claims 1 and 3 under 35 U.S.C. § 103(a) is overcome.

Therefore, Applicant submits that the present application is condition for allowance, and allowance is respectfully solicited.

If the Examiner believes that any outstanding issue could be resolved through a telephone interview, Applicant kindly requests the Examiner to contact the undersigned at the telephone number listed below.

Applicant believes that no additional fees are due for the subject application. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,

/John J. Penny, Jr./

Date: July 5, 2007

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